

Monday July 11, 2022

Walter Gage Residence

Arrival and Registration

3:00pm-7:00pm

Tues July 12, 2022

Registration The Nest Great Hall Foyer

Opening remarks The Nest Great Hall South

Session 1 Ecology & Biogeography

Chair: Andre Lachance

coffee/tea

Keynote -1 Phil Hieter introduces

Lunch

Session 2 Wine Fermentation

Chair: Vladimir Jiranek

coffee/tea

Session 3 Evolutionary Genomics

Chair: Jose Paulo Sampaio

Time

8:00am-9:00am

9:00am-9:30am

9:30am-9:55am

9:55am-10:20am

10:20am-10:45am

10:45am-11:00am

11:00am-11:15am

11:15am-11:30am

11:30am-12:00pm

12:00pm-1:00pm

1:00pm-2:30pm

2:30pm-2:55pm

2:55pm-3:20pm

3:20pm-3:35pm

3:35pm-3:50pm

3:50pm-4:05pm

4:05pm-4:30pm

4:30pm-4:55pm

4:55pm-5:20pm

5:20pm-5:35pm

5:35pm-5:50pm

Andre Lachance

Daniela Delneri

Matthew Goddard

Evodia Setati

Chris Curtis

Vaskar Mukherjee

Kenneth Wolfe - EMBO Keynote ! Killer toxins and evolution of the genetic code in yeasts

Vladimir Jiranek

Jean-Luc Legras

Irene de Guidi

Rafael Álvarez-Rafael

Carmen Becerra

Jose Paulo Sampaio

Chris Todd Hittinger

Laetitia Maroc

John Wolters

Forty years of yeast biogeography

Phenotypic analysis and plasticity of cold-tolerant genes in different species

belonging to the *Saccharomyces* genus

What drives yeast community assemblage?

Hyphopichia pseudoburtonii, a mycelial yeast with biocontrol potential against grape

bunch rot-associated moulds

Population genomics of *Brettanomyces bruxellensis* wine isolates from New Zealand

Bioprospecting at an unprecedented scale with RISE processum AB

Selecting and favouring non-*Saccharomyces* yeast to tailor winemaking outcomes

Exploring yeast adaptation to the grape must

Can ecology explain variations in H₂S production?

Phenotypic diversity in the genus *Saccharomyces* for winemaking

Substrate-Binding Sites in Fungal Oligopeptide Transporters Are Highly Conserved

Among Distant Groups of Yeasts and Filamentous Fungi

Understanding ecology, populations and domestication across yeast genera

The making of yeast genomic and metabolic diversity

Laboratory micro-evolution in *Candida glabrata*

Gene Presence Networks Predict Novel Respiratory Genes from Multiple Losses of

Mitochondrial Complex I across Yeasts

		5:50pm-6:05pm	Carignan Bailey - Lallemand	Targeted brewing solutions through exploitation of classical and modern strain development techniques
Welcome Reception	Alumni Centre - Jack Pool Hall	7:00pm-10:30pm		
Wed July 13, 2022				
Session 4	Genome Engineering in non-traditional yeasts Chair: Anne Gschaedler	9am-11am		
		9am-9:25am	John Morrissey	Genomic approaches to explore and exploit <i>Kluyveromyces marxianus</i>
		9:25am-9:50am	Paola Branduardi	CRISPR-Cas9 Gene Editing in the Hybrid Yeast <i>Zygosaccharomyces parvii</i> : Optimizations and Findings
		9:50am-10:15am	Diethard Mattanovich	Metabolic engineering of <i>Komagataella phaffii</i> to serve a C1 bioeconomy
		10:15am-10:30am	Kameshwara Venkata Ramana Pe	Split-Marker recombination for efficient targeted genome editing in a CTG clade yeast, <i>Candida intermedia</i>
		10:30am-10:45am	Milan Certík	Genetically engineered <i>Yarrowia lipolytica</i> as a useful tool for production of lipophilic compounds
		10:45am-11a m	Bernd Mitic	A hidden methanol and CO2 assimilation pathway in the methylotrophic yeast <i>Komagataella phaffii</i> – the reductive glycine pathway
coffee/tea		11:am-11:30am		
Keynote -2	Brenda Andrews introduces	11:30am-12:30pm	Corey Nislow	Yeast as the biological breadboard for innovative technologies
Lunch		12:30pm-2pm		
FEMS YR Editorial Board meeting		1:10pm-1:50pm	Location TBD	
Session 5	Yeast Culture Collections Chair: Kyria Boundy-Mills	2pm-2:25pm	Kyria Boundy-Mills	Insider Tips to Maximize Research Benefits from Yeast Culture Collections
		2:30pm-2:55pm	Juncai Ma	WDCM Global Cooperation: Global Catalogue of Microorganisms (GCM) and 10K Type Strain Sequencing Project
		3:00pm-3:30pm	Vincent Robert	Yeasts and databasing
coffee/tea				
Session 6	Synthetic Biology Chair: Verena Siewers	4:00pm-4:25pm	Verena Siewers	Metabolite biosensors in yeast metabolic engineering
		4:25pm-4:50pm	Luciana Lazar-Stefanita	Stable twin rDNA loci form a single nucleolus in brewer's yeast
		4:50pm-5:05pm	Rebecca Shapiro	Development and application of CRISPR-based tools for functional genomic studies in the yeast pathogen <i>Candida albicans</i>

		5:05pm-5:25pm	David Stuart	Engineering <i>Lipomyces starkeyi</i> for the production of fatty alcohols from mixed carbon feedstock.
		5:25pm-5:40pm	Luca Torello Pianale	Biosensor-mediated monitoring of yeast intracellular state during bioprocesses
		5:40pm-5:55pm	Celina Borgstrom Tufvegren	Adipic acid production from glucose in recombinant <i>Saccharomyces cerevisiae</i>
Posters with beverages and snacks		6:00pm-7:30pm		
Commissioner Dinner 8pm-11pm		7:30pm onwards	Free time for dinner	
Thurs July 14, 2022				
<i>Session 7</i>	<i>Evolutionary Genomics</i>	9:00am-9:25am	Maitreya Dunham	High throughput testing of pharmacogene variants using yeast activity assays
	<i>Chair: Chris Todd Hittinger</i>	9:30am-9:55am	Joseph Schacherer	Species-wide exploration of the inherited gene expression variation in yeast
		10:00am-10:15am	Ana Pontes	Is MEL gene expansion involved in ecological adaptation in <i>S. cerevisiae</i> ?
		10:15am-10:30am	Francisco Cubillos	Structural variants define the fermentation potential across strains in <i>Lachancea cidri</i>
		10:30am-10:45am	Masako Takashima	Investigation of the orthologs that characterize Ascomycota and Basidiomycota
		10:45am-11:00am	Linda Horianopoulos	Identification of yeasts with high glycolytic flux for the development of novel cell factories
<i>coffee/tea</i>		11:00am-11:30am		
Keynote -3	Rahul Singh from Genome BC introduces	11:30am-1:00pm	Jay Keasling	Production of monoterpene indole alkaloids in yeast
	Panel Discussion		John Husnik	Renaissance Bioscience
			Oleg Tyurin	Bioboost Synbio Consulting
			Linda Horianopoulos	Dr. Chris Todd Hittinger's lab
Lunch		1:00pm-2:30pm		
<i>Session 8</i>	<i>Food and Beverage Fermentation</i>	2:30pm-2:55pm	Hiroshi Takagi	Functional Amino Acid Engineering in Yeast: Application to Brewing of Alcoholic Beverages
	<i>Chair: Hiroshi Takagi</i>	2:55pm-3:20pm	Lene Jespersen	Beneficial yeasts in food - <i>Debaryomyces hansenii</i> as a hidden gem?
		3:20pm-3:35pm	Gitte Knudsen	Non- <i>Saccharomyces</i> yeasts for beer production: Safety assessment of <i>Pichia kluyveri</i>
		3:35pm-3:50pm	Neža Cadež	Evolutionary engineering of autochthonous cider yeast strain for buckwheat beer fermentation

		3:50pm-4:05pm	Francisco Carrau	Biology of <i>Hanseniaspora vineae</i> and its potential contribution to understand yeast adaptations for food fermentation.
coffee/tea		4:00pm-4:30pm		
Session 9	Remembering Lex Scheffers: FEMS Yeast Research Yeast Physiology session Chair: John Morrissey	4:30pm-4:45pm	John Morrissey	Introduction to FEMS Yeast Research and Lex Scheffers
		4:45-5:00pm	Hana Sychrová	Trk1 Transporters in Yeast Cell Physiology
		5:00pm-5:15pm	Xiang Li	Correlation between cell morphology and metabolism and its underlying mechanism in yeasts
		5:15pm-5:30pm	Robert Mans	Engineering sugar transport to alter yeast physiology and increase product yields in yeast
		5:30pm-5:45pm	Maxime den Ridder	Temporal proteome dynamics of (minimal glycolysis) yeast during aerobic and anaerobic growth
		5:45pm-6:00pm	Andreas Gombert	The maximum specific growth rate (μ_{MAX}) of <i>Saccharomyces cerevisiae</i> : so often used so seldom put into perspective
		6:00pm-6:15pm	Nuno Mira	Comparative genomics unveils fundamental traits on the biology and physiology underlying the foe/friend behaviour in wine-making of Yeasts belonging to the Saccharomycotina family
		6:15pm-6:30pm	Paul Le Montagner	Bioadhesion properties of <i>Brettanomyces bruxellensis</i> : on the origin of wine spoilage
Posters with beverages and snacks		6:30pm-8:00pm		
		8pm onwards	Free Time for Dinner	
Friday July 15, 2022				
Session 10	Food and Beverage Fermentation Chair:	9:00am-9:25am	Florian Bauer	The wine yeast ecosystem: Molecular signatures of interactions between species
		9:30am-9:55am	Virginie Galeote	Diversity of the Fungal Oligopeptide Transporters in yeast and impact of oligopeptide uptake during wine fermentation
		10:00am-10:15am	Graeme Walker	Whisky fermentations with non- <i>Saccharomyces</i> yeasts
		10:15am-10:30am	Nikola Gyurchev	BEYOND <i>SACCHAROMYCES PASTORIANUS</i> FOR MODERN LAGER BREWS: EXPLORING NON- <i>CEREVISIAE</i> <i>SACCHAROMYCES</i> HYBRIDS WITH HETEROTIC MALTOTRIOSE CONSUMPTION AND NOVEL AROMA PROFILE
		10:30am-10:45am	Maria Joao Sousa	<i>Torulasporea delbrueckii</i> phenotypic and metabolic profiling for wine and bread industries and its underlying molecular bases

		10:45am-11:00am	Jules Harrouard	Phenotypic plasticity of the yeast species <i>Brettanomyces bruxellensis</i> across fermentation processes: toward the identification of traits underlying adaptation to anthropic environments?
Coffee		11:00am-11:30am		
<i>Keynote -4</i>	Diethard Mattanovich introduces	11:30am-12:30pm	Paula Gonçalves	Understanding the role for horizontal gene transfer in reshaping yeast metabolism
Lunch		12:30pm-2pm		
<i>Session 11</i>	<i>Industrial Ethanol Production</i>	2:00pm-2:25pm	Charles Abbas	Recent Development of Commercial Yeast Strains for Fuel Ethanol
	<i>Chair: Charles Abbas</i>	2:25pm-2:50pm	Andrei Sibirny	Regulation of xylose alcoholic fermentation in the thermotolerant yeast <i>Ogataea polymorpha</i> and construction of the advanced fermenting strains
		2:50pm-3:05pm	John Evans	Assessing population dynamics during adaptive laboratory evolution using microsatellite PCR analysis
		3:05pm-3:20pm	Johan Thevelein	Whole-genome transformation of yeast promotes a single causative host strain mutation absent from the donor genomic DNA that enhances tolerance to the selective condition applied
coffee/tea		3:35pm-4:00pm		
<i>Session 12</i>	<i>Functional Genomics</i>	4:00pm-4:25pm	Lieselotte Vermeersch	Why is the yeast lag phase so long?
	<i>Chair: Thibault Mayor</i>	4:25pm-4:50pm	Brenda Andrews	From phenotypes to pathways: global analysis of cellular networks using systematic yeast genetics and single cell image analysis
		4:50pm-5:05pm	Linghuo Jiang	Discovery of novel regulatory mechanisms in calcium/calcineurin signaling through a functional genomics approach
		5:05pm-5:20pm	Adrianna Skoneczna	Functional genomics reveals the significance of vesicular trafficking for telomere length control
		5:20pm-5:35pm	Thibault Mayor	Probing the genetic diversity of yeast to elevate heterologous protein expression
		5:45pm-6:00pm		CLOSING CEREMONIES including announcement of FEMS Yeast Research and GSA poster awards
ISSY36 Banquet	Sage Restaurant	7:00pm-12am		